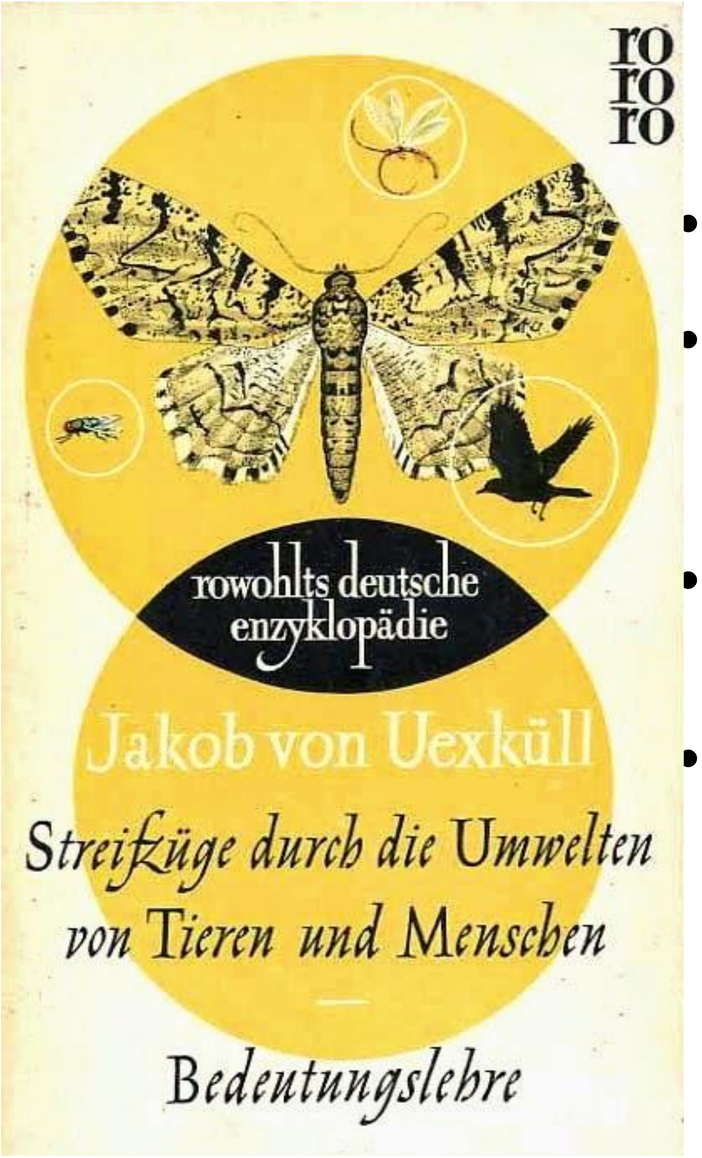
Puhtu islet – the Uexküll's land in Estonia

Hi !

Uexküll’s definition of umwelt



- Umwelt is "the phenomenal world or the self-world of the animal."
- "all that a subject perceives becomes his perceptual world and all that he does, his effector world. Perceptual and effector worlds together form a closed unit, the umwelt.”
- there is like a “a soap bubble around each creature to represent its own world, filled with the perceptions which it alone knows."
- "the soap bubble [...] encloses each of us as well. [...] individual soap bubbles, which intersect each other smoothly, [...] are built up of subjective perceptual signs. There is no space independent of subjects."

since then –

important developments have taken place in semiotics:

(a) under the influence of biosemiotics, the *concept of umwelt* has become commonly used in semiotics (being added to the concept of sign in the theory of semiotics), however variously defined

(b) while the focus of structuralism was codes and invariances in semiotic systems,

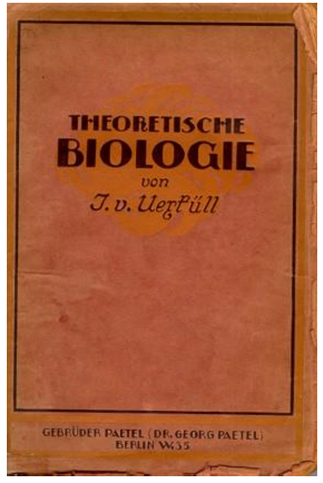
(c) poststructuralism has dealt with the aspects of change and impermanence, openness of interpretations;

(d) but now (in the ecological era), ecosemiotics has emerged, and the *importance of the stabilizing aspect* of semiotic processes has emerged again

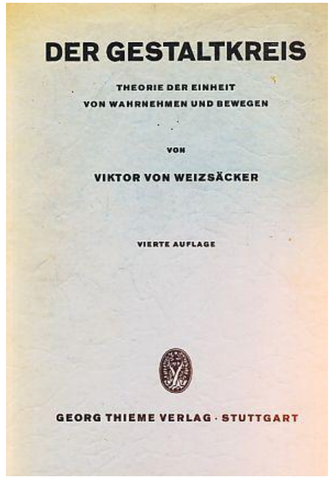
From *Funktionskreis* to *Gestaltkreis*

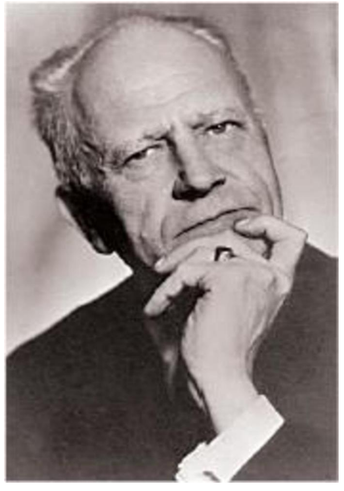
functional circle → **gestalt circle**

Jakob von Uexküll
(1864–1944)



Viktor von Weizsäcker
(1886–1957)



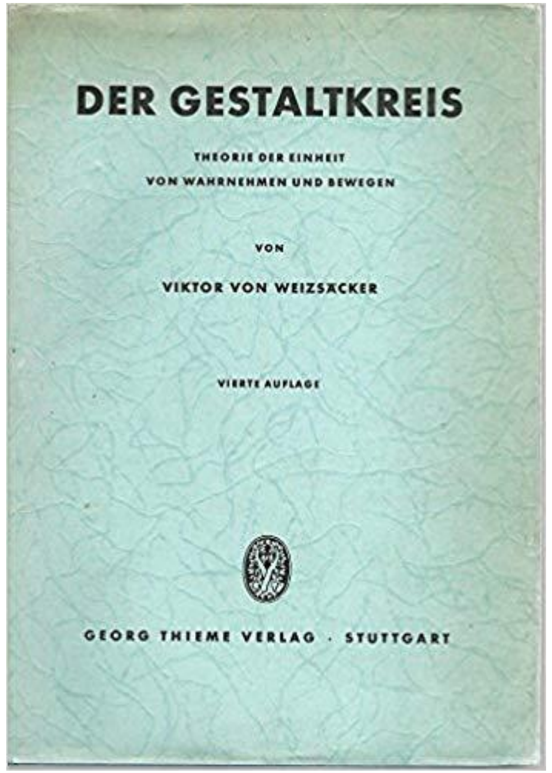


„Life is not a sequence of cause and effect, but *choice*.“

Viktor von Weizsäcker

„***Der Gestaltkreis: Theorie der Einheit von Wahrnehmen und Bewegen***“ (1940: 126)
[„The Gestalt-circle: theory of the unity of perception and movement“]

„***Gestalt und Zeit***“ (1942).
[„Gestalt and Time“]



Uexküll, Jakob 1928. *Theoretische Biologie.*

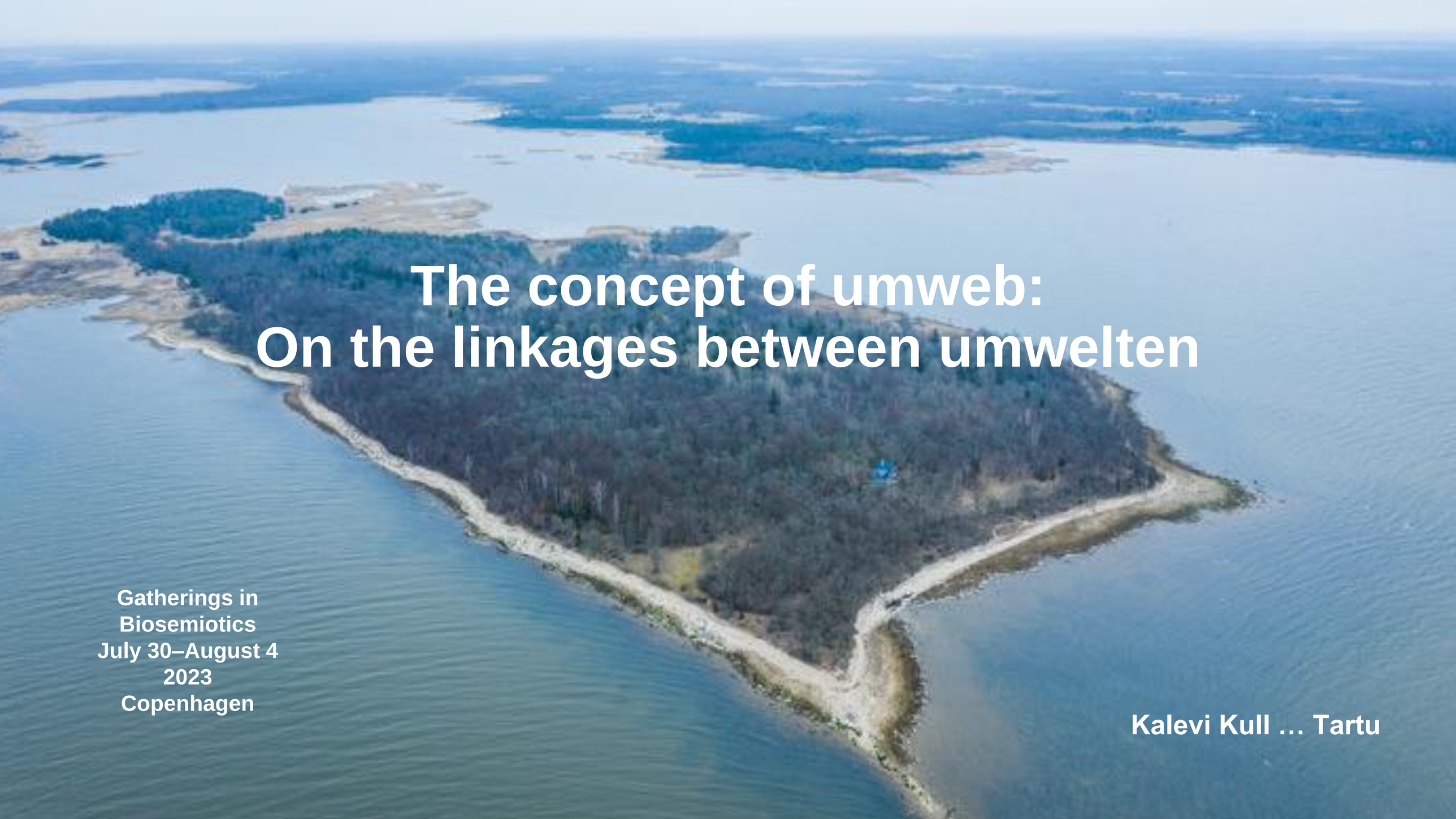
Die zeitliche Umgrenzung der Umwelten:

- „Wenn man die Umwelt eines Tieres in einem bestimmten **Moment als Kreis** darstellt, so kann man jeden darauffolgenden Moment als einen neuen Umweltkreis hinzufügen.“

- "Ein Lebewesen besitzt grundsätzlich eine Zeitgestalt."

„Having an intrinsic now is a peculiar form of temporality shared by all living forms.“

(Eliseo Fernández 2010)



The concept of umweb:
On the linkages between umwelten

Gatherings in Biosemiotics
July 30–August 4
2023
Copenhagen

Kalevi Kull … Tartu

umwelt

- physico-chemical characteristics influencing organism
- momentary distinctions made by organism
- the whole library of organism’s habits

umwelt

(bio)physical

- physico-chemical characteristics influencing organism

(bio)semiotic

- momentary distinctions made by organism
- the whole library of organism’s habits

umwelt

(bio)physical

- physico-chemical characteristics influencing organism
- butyric acid; temperature; (but no air vibrations)

biophysical umwelt

(bio)semiotic

- momentary distinctions made by organism
- smell; warmth; (but no sound)

momentary umwelt (phenomenal)

- the whole library of organism's habits
- falling if smelling 'butyric acid'; boring into the skin if it feels warm

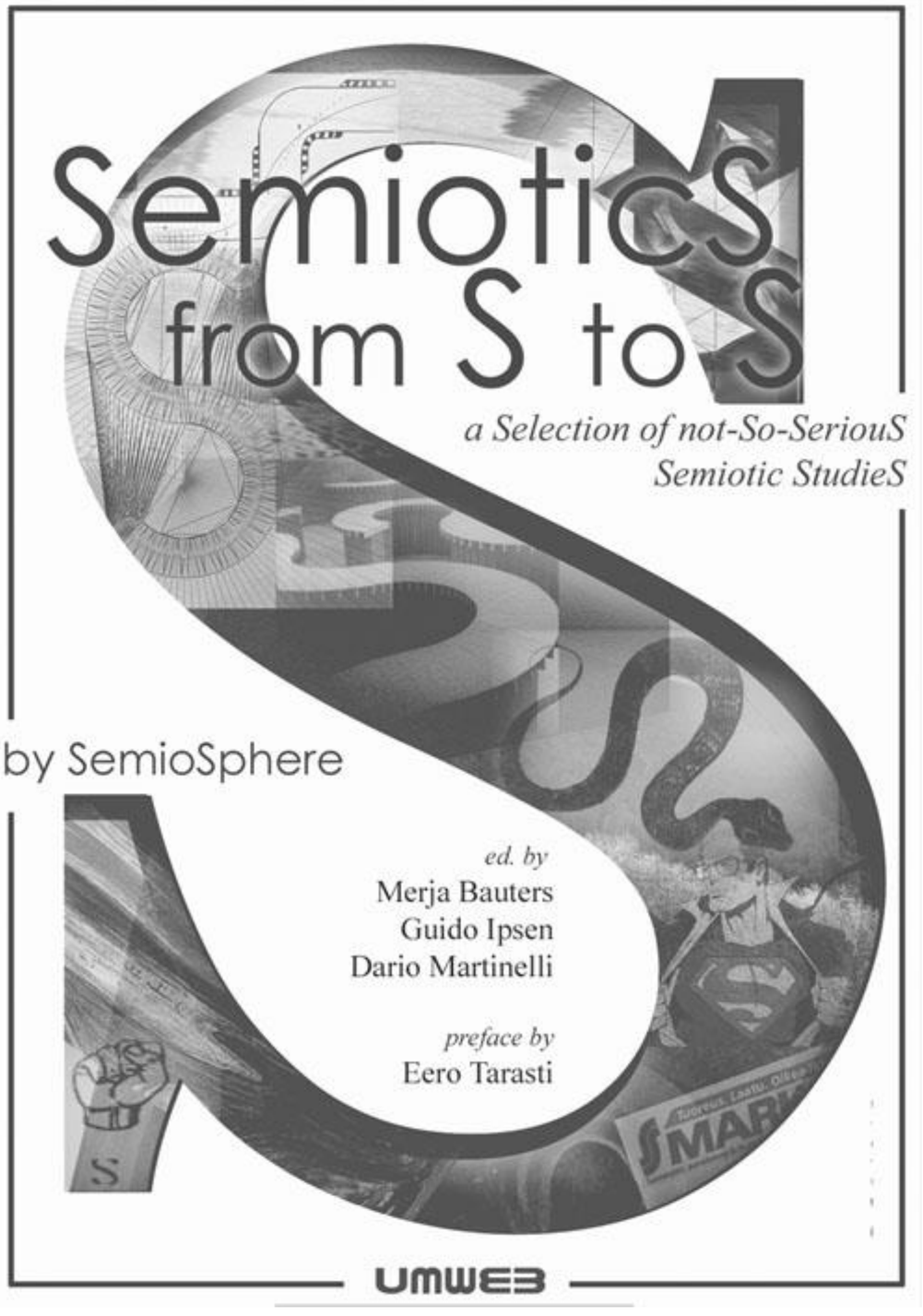
umweb

umwelt = the content of Now
the complex of distinctions at the present

umweb = the library of somebody's habits (sign relations)
series of correspondences

umweb term

2004



Semiotic (arbitrary) correspondences

no meaning-making

code	one-way mapping	sequential, determined; coding	no momentary alternatives	sequential feedback cycle
habit	two-way mapping, code-duality	circular, indeterminate; interpretation	possibilities for momentary alternatives	two coupled functional circles in simultaneity

with meaning-making

Umwelt, umweb, and other similar concepts

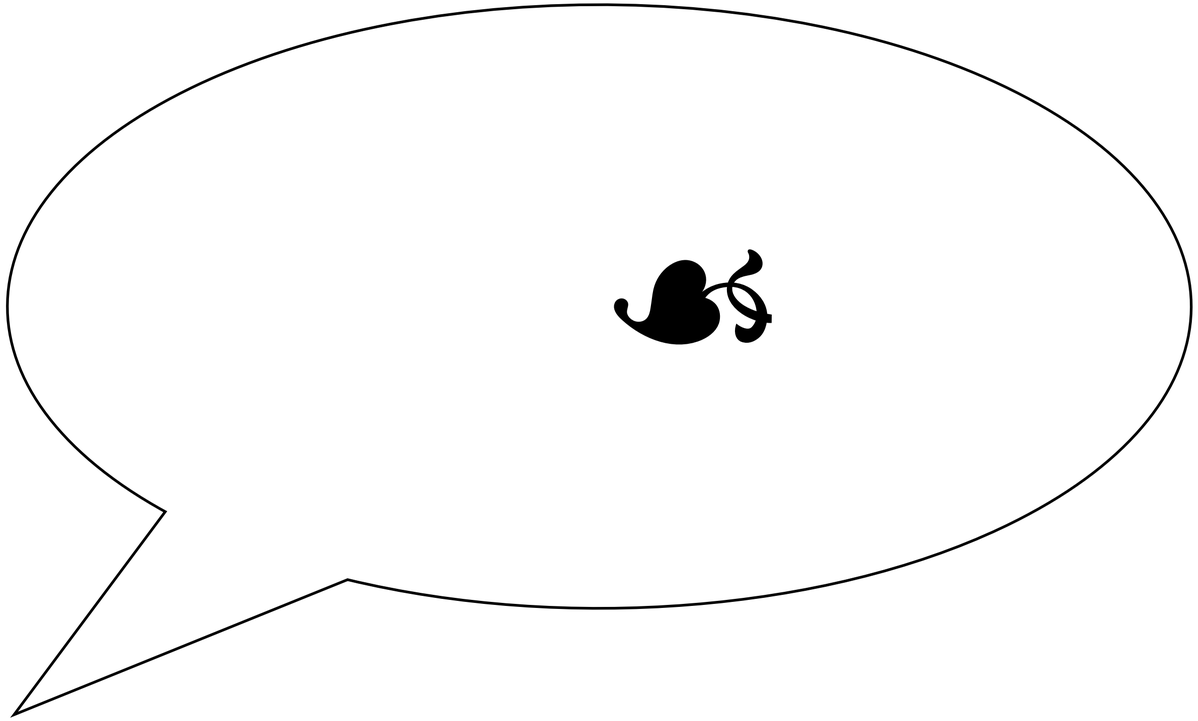
umwelt – subjective world of organism; the world with meanings

- ***momentary umwelt*** **–** the field of meanings in the subjective present (fast; semantic)
- ***umweb*** **–** distributed umwelt; the web of meaning relations or habits over the course of time (slow; pragmatic)

- ***umwelt tunnel*** **–** sequence of organism's subjective moments during its ontogeny (Uexküll)
- ***semiosphere*** **–** meaning-relations of all agents, thus being a cover term (Lotman)
- ***actor-network*** **–** material-semiotic network of agents (Latour)
- ***chronotope*** **–** spacetime of a narrative (Ukhtomsky, Bakhtin)
- ***biological act*** **–** as Gestalt-circle (Weizsäcker)

the sign cannot be anywhere but in the umwelt

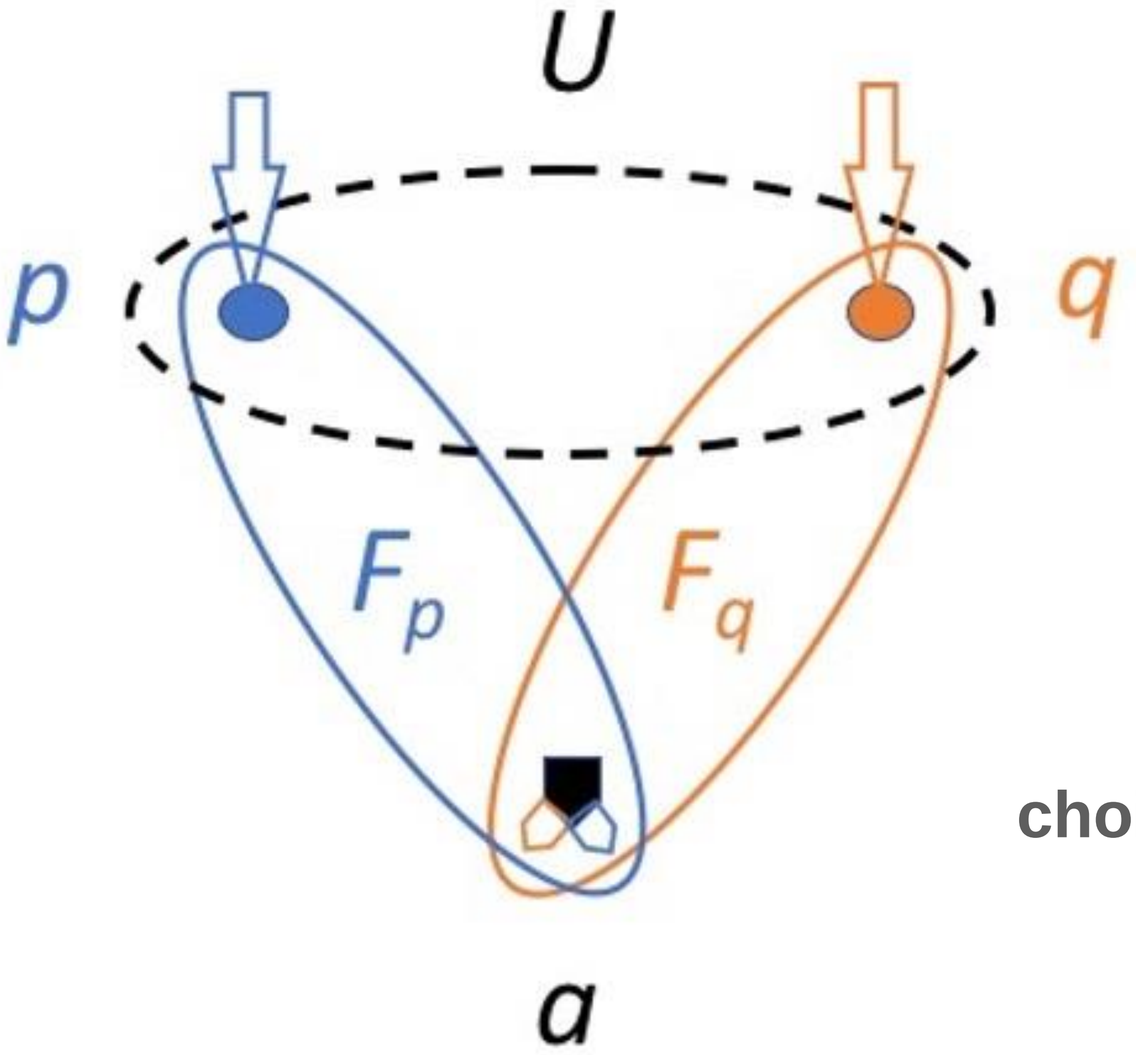
- A sign cannot be without an umwelt, and an umwelt without a sign



the minimal meaning-making system

umwelt

innenwelt



choice

Σ

1. Umwelt: three different concepts
2. Umwelt is Now, umweb is always
3. Habit is not a code
4. > umwelt-based general semiotics
5. > umweb-based general biology

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Thank you!